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APPLICATION NO. FILING D.		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/646,950	08/21/2003		Jasper D. Rine	B96-021-6	2061		
23379	7590	03/08/2006		EXAM	EXAMINER		
RICHARD	ARON (	OSMAN	RAMIREZ	RAMIREZ, DELIA M			
SCIENCE A 242 AVE V		INOLOGY LAW G . OCEANO	ART UNIT	PAPER NUMBER			
SAN CLEM	ЕМТЕ, С	A 92672	1652				

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application	No	Applicant(s)					
Office Action Summary			10/646,950		RINE ET AL.					
			Examiner		Art Unit	<del></del>				
			Delia M. Ran	nirez	1652					
The M	IAILING DATE of this commu	nication appe				ddress				
Period for Reply										
WHICHEVEF - Extensions of till after SIX (6) MC - If NO period for - Failure to reply Any reply received	ED STATUTORY PERIOD R R IS LONGER, FROM THE M me may be available under the provision ONTHS from the mailing date of this com reply is specified above, the maximum s within the set or extended period for repl red by the Office later than three months erm adjustment. See 37 CFR 1.704(b).	MAILING DA s of 37 CFR 1.136 munication. tatutory period will y will, by statute, of	TE OF THIS 6(a). In no event, Il apply and will excause the applica	COMMUNICATION however, may a reply be tin expire SIX (6) MONTHS from tion to become ABANDONE	N. mely filed the mailing date of this ED (35 U.S.C. § 133).	, ,				
Status										
1) Respon	nsive to communication(s) fil	ed on								
· <u> </u>	·	2b)⊠ This a		-final.						
/ <del></del>		·—			osecution as to th	e merits is				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.									
Disposition of C	claims									
4)⊠ Claim(s	s) 1-20 is/are pending in the	application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.									
	Claim(s) is/are allowed.									
6) Claim(s	Claim(s) is/are rejected.									
7) Claim(s	s) is/are objected to.									
8) Claim(s	s) <u>1-20</u> are subject to restrict	ion and/or el	lection requi	rement.						
Application Pap	ers									
9)☐ The spe	ecification is objected to by the	ne Examiner								
•	wing(s) filed on is/are			objected to by the	Examiner.					
	nt may not request that any obje			· ·						
	ement drawing sheet(s) including		- · ·	<u>-</u>	` ,	CFR 1.121(d).				
	h or declaration is objected t									
Priority under 3	5 U.S.C. § 119									
12)☐ Acknow	ledgment is made of a claim	for foreian r	oriority unde	r 35 U.S.C. & 119/a	)-(d) or (f).					
	b)☐ Some * c)☐ None of:				, (0, 0. (.).					
	Certified copies of the priority	documents	have been i	eceived.						
	2. Certified copies of the priority documents have been received in Application No.									
	Copies of the certified copies			• •		l Stage				
	application from the Internation		=			J				
* See the	attached detailed Office action	on for a list o	of the certifie	d copies not receive	ed.					
				·						
Attachment(s)										
	rences Cited (PTO-892)		4)	Interview Summary						
	sperson's Patent Drawing Review (l sclosure Statement(s) (PTO-1449 o		51	Paper No(s)/Mail D		'O-152)				
Paper No(s)/M	ail Date	1. 10/00/00)		Other:	· · · · · · · · · · · · · · · · · · ·	,				

## **DETAILED ACTION**

## Status of the Application

Claims 1-20 are pending.

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-3, 5-7, 9, 11, drawn to an expression vector comprising a polynucleotide encoding the polypeptide of SEQ ID NO: 2 or 4, and a recombinant cell comprising said vector, classified in class 435, subclass 320.1.
  - II. Claims 4 and 10, drawn to a polynucleotide comprising SEQ ID NO: 6, and a recombinant cell comprising said polynucleotide, classified in class 536, subclass 23.1.
  - III. Claims 8 and 12, drawn to a polynucleotide comprising SEQ ID NO: 5, and a recombinant cell comprising said polynucleotide, classified in class 536, subclass 23.1.
  - IV. Claim 13, drawn to a method of making a polynucleotide comprising SEQ ID NO: 6, classified in class 536, subclass 25.3.
  - V. Claim 14, drawn to a method of making a polynucleotide comprising SEQ ID NO: 5, classified in class 536, subclass 25.3.
  - VI. Claims 15, 17, drawn to a method of identifying a compound which inhibits the proteolytic removal of an AAX tripeptide of a CAAX protein in a cell comprising a polynucleotide encoding the polypeptide of SEQ ID NO: 2 or 4, classified in class 435, subclass 23.
  - VII. Claims 16 and 19, drawn to a method of identifying a compound which inhibits (1) the proteolytic removal of an AAX tripeptide of a CAAX protein in a cell comprising a polynucleotide comprising SEQ ID NO: 6, or (2) the Rce1P or Afc1p activity of a

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polypeptide encoded by the polynucleotide of SEQ ID NO: 6 classified in class 435, subclass 23.

VIII. Claims 18 and 20, drawn to a method of identifying a compound which inhibits (1) the proteolytic removal of an AAX tripeptide of a CAAX protein in a cell comprising a polynucleotide comprising SEQ ID NO: 5, or (2) the Rce1P or Afc1p activity of a polypeptide encoded by the polynucleotide of SEQ ID NO: 5 classified in class 435, subclass 23.

The inventions are distinct, each from the other because of the following reasons:

- 2. Groups I-III each comprise a chemically unrelated structure capable of separate manufacture, use, and effect. The nucleic acids of Groups I-III comprise unrelated nucleotide sequences and encode different proteins. Therefore, the nucleic acids of Groups I-III can be used to recombinantly produce proteins having unrelated amino acid sequences. Furthermore, the nucleic acids of Groups I-III are not required for the manufacture of each other.
- 3. Inventions I-III and VI-VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acids of Inventions I-III can be used in the methods of Inventions VI-VIII, respectively, as well as to recombinantly produce the corresponding proteins.
- 4. Inventions IV-VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the methods of Inventions IV-VIII comprise different steps, use different products and produce different results. The method of Invention IV is a method of manufacture of the nucleic acid of Invention II, whereas the method of Invention V is a

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method of manufacture of the nucleic acid of Invention III. The method of Invention VI is a method of use of the nucleic acid of Invention I and is objective is to identify inhibitors of the polypeptides of SEQ ID NO: 2 or 4. The method of Invention VII is a method of use of the nucleic acid of Invention II and is objective is to identify inhibitors of polypeptides encoded by the polynucleotide of SEQ ID NO: 6.

The method of Invention VIII is a method of use of the nucleic acid of Invention III and is objective is to identify inhibitors of polypeptides encoded by the polynucleotide of SEQ ID NO: 5.

- 5. Inventions II-III and IV-V are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the nucleic acids of Inventions II-III can also be produced by chemical synthesis.
- 6. As set forth in MPEP § 803, the criteria for a proper restriction between patentably distinct inventions requires that the inventions must be independent or distinct as claimed, and a search of all the inventions would impose a serious burden on the examiner. Groups I-VIII have been shown to be independent or distinct, for the reasons set forth above. MPEP § 803 also indicates that a serious burden on the examiner may be prima facie shown if the Examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search. The inventions of Groups I-VIII have acquired a separate status in the art because of their recognized divergent subject matter, as shown by their different classification. In addition, a search of all the inventions would require at a minimum a separate patented/non-patented literature search, a class/subclass search, and sequence searches. These searches are not all co-extensive. Therefore a comprehensive examination of all groups would impose an undue burden on the Examiner. Thus, restriction for examination purposes as indicated is proper.

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7. The Examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

- 8. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.
- 9. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement can be traversed (37 CFR 1.143).

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10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named

inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of

inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37

CFR 1.17(i).

11. Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

12. Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Delia M. Ramirez whose telephone number is (571) 272-0938. The examiner can normally

be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone

are unsuccessful, the examiner's supervisor, Dr. Ponnathapura Achutamurthy can be reached on (571)

272-0928. Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (571) 272-1600.

Delia M. Ramirez, Ph.D.

Patent Examiner

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DR

March 5, 2006